Division of Solid & Hazardous Waste P.O. Box 414 Trenton, NJ 08625-0414 Tel. # (609) 984-6880 Fax. # (609) 633-9839

ENGINEERING DESIGN APPROVAL

Under provisions of N.J.S.A. 13:1E-1 et seq., known as the Solid Waste Management Act, engineering design approval is hereby issued to:

HERCULES, INCORPORATED

For the purpose of operating a: Sanitary Landfill

on LOT NO.(S): Part of 4

BLOCK NO.(S):

in the Municipality of: Roxbury Township

COUNTY: Morris

under Facility Registration Number: 1436B

This Approval is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This Approval shall not prejudice any claim the State may have to Riparian land, nor does it permit the registrant to fill or alter, or allow to be filled or altered, in any way, lands that are deemed to be Riparian, wetlands, stream encroachment or flood plains, or within the Coastal Area Facility Review Act (CAFRA) zone without first acquiring the necessary grants, permits or approvals from the Department of Environmental Protection.

Date __February 16, 1978 Signed by Beatrice S. Tylutki, Director

Director

Solid Waste Administration

Engineering Design Approval Conditions for Hercules, Incorporated, Kenvil, New Jersey, Sanitary Landfill, Roxbury Township, Morris County, Facility Registration Number 1436B.

This Approval is conditioned upon the compliance and implementation of the following:

1. Permitted Waste Types

Only the following waste types shall be accepted at this facility:

<u>I.D.</u>	WASTE
13	Bulky Waste (tree stumps and construction and demolition wastes)
23	Vegetative Waste
27	Non-chemical Industrial Waste (cardboard boxes, pallets, wood crates, fiber drums, empty barrels and waste paper)

2. Prohibited Waste Types

The following materials, liquid or solid, shall not be disposed of at this facility:

I.D.	WASTE
10	Municipal
12	Dry Sewage Sludge
17	Dry Hazardous Waste
18	Dry Non-Hazardous Chemical Waste
25	Animal and Good Processing Waste
26	Oil Spill Clean-Up Wastes
70	Waste Oil and Sludges
72	Bulk Liquid and Semi-Liquids
73	Septic Tank Clean-Out Wastes
74	Liquid Sewage Sludge
76	Liquid Hazardous Waste
77	Liquid Chemical Waste

3. Groundwater Monitoring

Two (2) groundwater observation wells shall be installed at this landfill. Those wells shall be constructed in accordance with

the attached specifications and shall be installed within sixty (60) days of the date of this Approval.

These wells shall be located at the following positions, as shown on drawing sheet number 080-0000-21045-4KN-01 of the referenced engineering plans.

Well #1: Approximately 100 feet northward from the southeast boundary corner (N 15,030 E 14,825). The well shall be placed 75 to 100 feet outside the perimeter of the fill area.

Well #2: Approximately midway along the Northern boundary of the site (N 15,390 E 14,695). The well shall be placed 75 to 100 feet outside the perimeter of the fill area.

Groundwater from each of these wells shall be sampled quarterly and analyzed by a New Jersey recognized laboratory. The monitoring shall be in accordance with N.J.A.C. 7:26-2.5.22 of the Rules of the Solid Waste Administration.

4. Operational Plan and Site Preparation

The landfill operation shall proceed with the emplacement of a single lift of wastes in a combination of trench and area methods, beginning at the northern edge of the site and advancing towards the southern end. Site preparation shall be in accordance with the letter written to this Department by James E. DeLancey, P.E., Works Engineer, dated June 4, 1975.

5. Site Boundary and Survey Marks

Four (4) boundary marks shall be set and maintained, one (1) at each corner of this landfill to clearly delineate the landfill area and to establish ground elevations. This shall be done within sixty (60) days from the date of this approval by a New Jersey licensed Land Surveyor in accordance with the attached specification. A map showing the actual locations of these marks and the ground elevations at each mark shall also be submitted within this time frame.

6. Surface Water Control

The grade and thickness of cover material on all surfaces of the landfill shall be maintained regulatory so as to prevent the occurrence of ponding of water anywhere on the landfill. All surface drainage from the landfill shall be towards Duck Pond on the Hercules, Incorporated Kenvil Plant property.

7. Excavation

Site excavation shall be in accordance with the excavation plan depicted on referenced drawing sheets numbered 080-0000-21056-4KN-00, 080-0000-21057-4KN-00, and 080-0000-21047-4KN-00. The maximum depth of excavation shall be to elevation 759 feet. Any portion of the ground surface of this landfill where the natural elevation is below 759 feet shall be pre-filled with clean soil to elevation 759 feet prior to the disposal of any solid waste on that surface, as specified in the June 4, 1975 letter to this Administration from James B. DeLancey, P.E., Works Engineer.

8. Leachate Collection, Treatment and/or Disposal

If and when there is evidence of leachate flowing out of this landfill, it shall be the responsibility of Hercules, Incorporated to submit a design for a leachate collection and treatment and/or disposal system to this Administration for approval. This leachate collection and treatment and/or disposal system shall be implemented promptly upon receipt of such approval.

9. Gas Venting

If and when there is evidence of subsurface methane gas migration from this landfill, it shall be the responsibility of the registrant to submit a design for a methane gas venting system to this Administration for approval. This methane gas venting system shall be implemented promptly upon receipt of such approval.

10. Daily and Intermediate Cover

Daily and intermediate cover material, as used by the registrant, shall be of the type(s) that can be workable under all weather conditions.

11. Litter Control

Littler shall be controlled through the use of fences of sufficient height or equivalent means. Off-site litter shall be removed on a daily basis.

12. Dust Control

Dust control shall be effected by the spraying of water or by the spreading of calcium chloride or equivalent means as approved by this Administration.

13. Odor Control

Odor associated with solid waste shall be controlled by the use of daily cover. In the event that this is not satisfactory, then a non-toxic deodorant shall be used as approved by this Administration.

14. Fire Safety

An adequate water supply and/or fire fighting equipment shall be readily available on-site or on call to extinguish any and all fires. Fire fighting procedures shall be posted.

15. Maximum Elevation

The maximum elevation shall be 778 feet above sea level. This elevation and slopes are to be as shown on drawing sheet number 080-0000-21046-4KN-02 of the referenced engineering plans. No higher elevation than 778 feet is permitted.

16. Final Cover

The final cover shall consist of a minimum of two (2) feet of compacted soil suitable to support grass growth. This final cover shall be applied to each portion of the landfill within six (6) months after that portion has been filled to final grade. This cover shall be graded so as to facilitate drainage therefrom, and shall be revegetated by sowing with grass seed during the Spring and/or Fall in accordance with U.S. Soil Conservation Service Specifications or the recommendations of the county agricultural agent.

17. Plans On-Site

One complete set of the referenced engineering plans and these conditions of engineering design approval shall be kept at this facility and shall be available for inspection by Department personnel or its designated representatives.

18. Referenced Engineering Plans

The construction and operation of this facility shall be in accordance with the provisions of $\underline{\text{N.J.A.C.}}$ 7:26 $\underline{\text{et}}$ $\underline{\text{seq.}}$, the engineering plans prepared by James E. DeLancey, P.E. (specifically: the drawings numbered 080-0000-21045-4KN-01, dated January 4, 1974, 080-0000-21046-4KN-02, dated January 9, 1974 080-0000-21056-4KN-00 and 080-0000-21057-4KN-00, dated April 10, 1975 and 080-0000-21047-4KN-00, dated May 24, 1974, and

the letter to this Administration from James E. DeLancey, Works Engineer, dated June 4, 1975), and these approval conditions. In case of conflict, the conditions specified herein shall supercede those of the engineering plans.

Failure to comply with any or all limitations heretofore mentioned will result in the Department seeking relief under N.J.S.A. 13:1E-1et seq., the Solid Waste Management Act. Specifically, failure to so comply may be considered a violation of N.J.S.A. 13:1E-12.

This Engineering Design Approval is not valid until the original is signed by the registrant, signifying acceptance of all terms and conditions, and is returned to the Solid Waste Administration for final processing.